Kentucky Department of Education

Grade 11
Sample Released Questions

January 2004

This document contains released questions from the Kentucky Core Content Test. These questions are presented in the new test format that will be used for the 2004 KCCT. You will notice some design changes. Students will be marking their answers to multiple-choice questions and writing their answers to open-response questions directly in the test booklet. Blank pages have been included, where necessary, so that each open-response question is facing the page on which students are to write their response. The number of items in this document does not necessarily match the number of items that will appear in the actual test booklets.

Table of Contents

The following is the general guide that will be used to evaluate your responses to the open-response questions in this test.

KENTUCKY GENERAL SCORING GUIDE

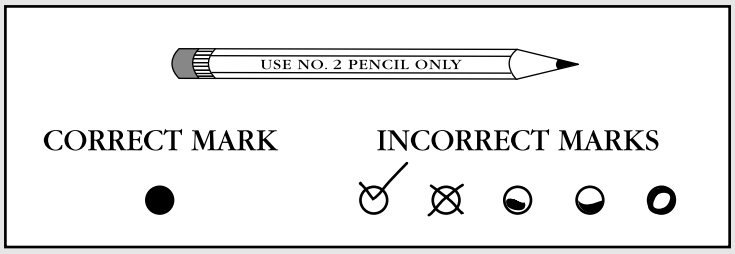
SCORE POINT 4	• You complete all important components of the question and communicate ideas clearly. • You demonstrate in-depth understanding of the relevant concepts and/or processes. • Where appropriate, you choose more efficient and/or sophisticated processes. • Where appropriate, you offer insightful interpretations or extensions (generalizations, applications, analogies).
SCORE POINT 3	• You complete most important components of the question and communicate clearly. • You demonstrate an understanding of major concepts even though you overlook or misunderstand some less-important ideas or details.
SCORE POINT 2	• You complete some important components of the question and communicate those components clearly. • You demonstrate that there are gaps in your conceptual understanding.
SCORE POINT 1	• You show minimal understanding of the question. • You address only a small portion of the question.
SCORE POINT 0	• Your answer is totally incorrect or irrelevant.
BLANK	• You did not give any answer at all.

PROFICIENCY AND BEYOND

Kentucky Department of Education

Grade 11
Mathematics

WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



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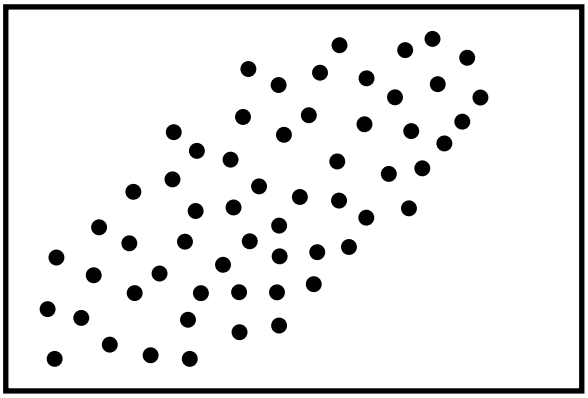
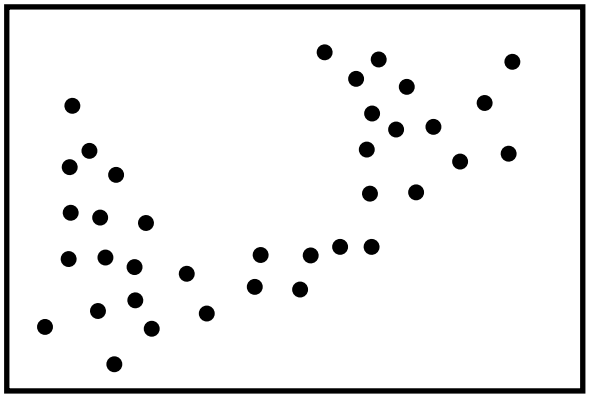
MATHEMATICS

Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

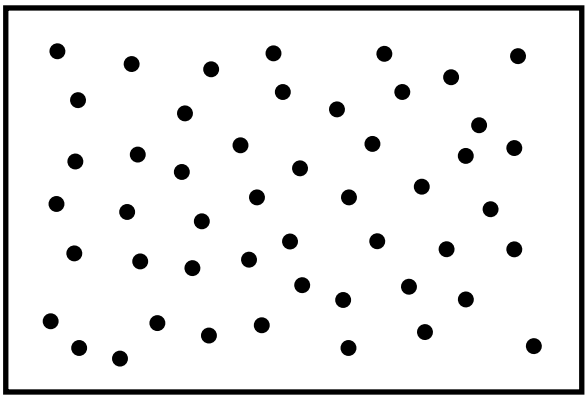
Use the scatter plots below to answer question 1.



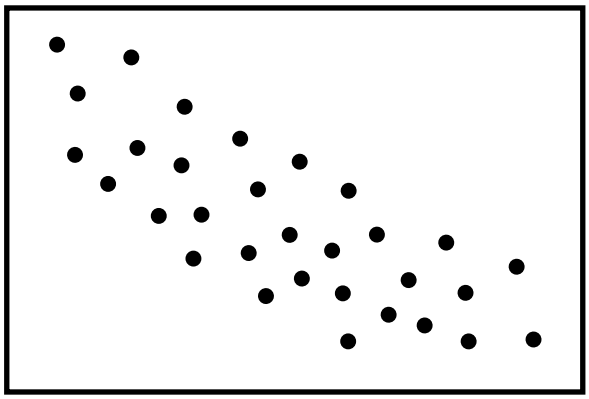
A



B



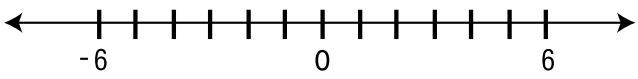
C



D

1. Which of the scatter plots shown above suggests a strong negative correlation?
   - ○ A
   - ○ B
   - ○ C
   - ○ D

2. Which number would be the closest to zero on the number line?



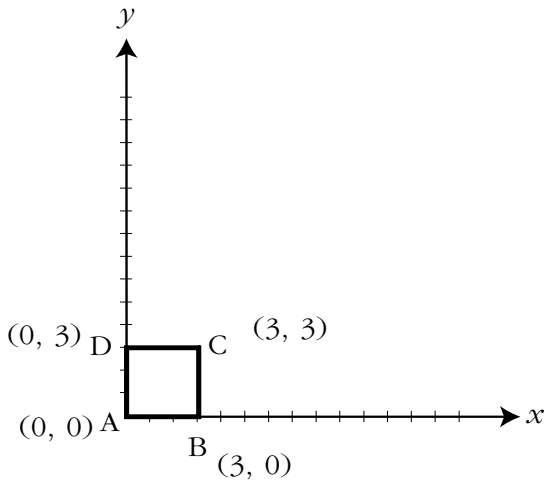
○ $\sqrt{2}$

○ -3

○ $\frac{3}{2}$

○ -1

3. The diagram below shows four points that form square ABCD.



If square ABCD is transformed by the rule $(x, y) \Rightarrow (2x, 3y)$ into the image A'B'C'D', what type of quadrilateral is image A'B'C'D'?

○ square

○ rectangle

○ rhombus

○ trapezoid

4. Which chart below shows an example of inverse variation?

○

x	2	5	10	20	25	50
y	50	20	10	5	4	2

○

x	-8	-7	-6	-5	-4	-3	-2	-1	0
y	1	1	1	1	2	2	2	3	4

○

x	-8	-6	-4	-2	0	2	4	6
y	4	3	2	1	0	1	2	3

○

x	1	2	3	4	5	6	7
y	4	8	12	16	20	24	28

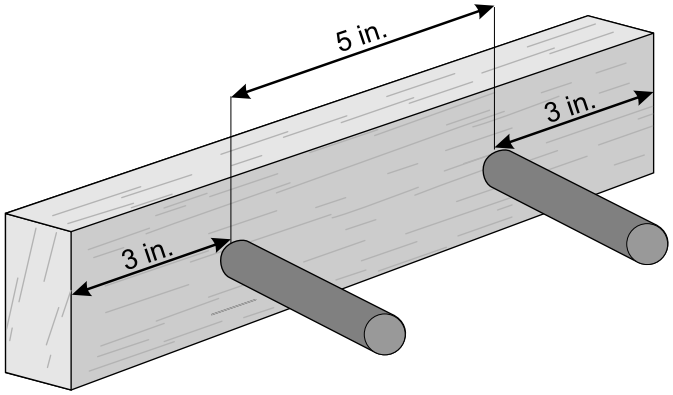
Turn the page and continue with the next question →

MATHEMATICS OPEN-RESPONSE QUESTIONS

Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet. For each open-response question, use the grid provided in this test booklet to create any required charts or graphs. If a question does not require a chart or graph, write your written response over the grid lines.

Write your answer to question 5 in the space provided on the next page.

Wooden Peg Racks



2-peg rack

5. You work in a factory that makes wooden craft items. Your job is to assemble kits for wooden peg racks. Each rack contains 1 to 12 pegs. There must be a distance of 5 inches from the center of one peg to the center of the next peg and a distance of 3 inches from the end of the rack to the center of the nearest peg.

   a. Make a table showing the wood lengths needed for racks containing 1 peg, 2 pegs, 3 pegs, and 4 pegs.

   b. What is the wood length of a rack with 7 pegs? Show your procedure.

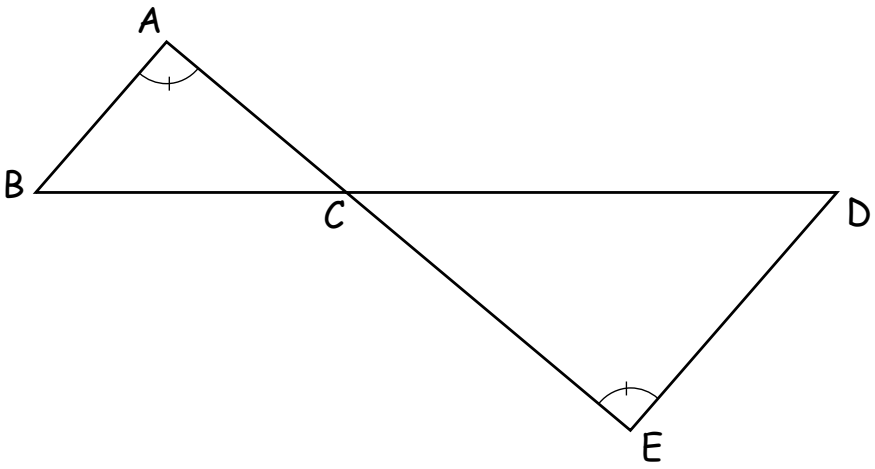
   c. Create a rule that will determine how long the wood length must be to make a rack holding n pegs.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

5.

Write your answer to question 6 in the space provided on the next page.

Similar Triangles



6. In her geometry class, Karen constructed the figure above in which $\overleftrightarrow{AB}$ is parallel to $\overleftrightarrow{ED}$ and $\angle A \cong \angle E$. The two triangles in the figure are similar.
   a. Name the two similar triangles (with vertices in correct order).
   b. Explain why the two triangles are similar.
   c. What is the measure of y? Show your procedure.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

6.

Write your answer to question 7 in the space provided on the next page.

Systems of Equations

7. The Hardwood Furniture Company manufactures small tables and chairs. It costs \$30 to make each table and \$20 to make each chair. The amount available to produce all the tables and chairs in one week is \$1,200. Let t represent the number of tables produced and c represent the number of chairs produced.
   a. The equation for the cost of making furniture for one week is $30t + 20c = 1{,}200$. On the grid on the next page, construct a graph of this equation (with correct labels and scales).
   b. The Hardwood Furniture Company always produces two chairs with each table. Write an equation that represents the number of chairs (c) in terms of the number of tables (t). Graph and label this equation on the same grid used for **part a**.
   c. Determine the number of tables and chairs the Hardwood Furniture Company can produce per week based on the production costs and the amount of money available (i.e., \$1,200). Round the answer appropriately.
   d. Explain how the answer to **part c** is indicated on the graph.

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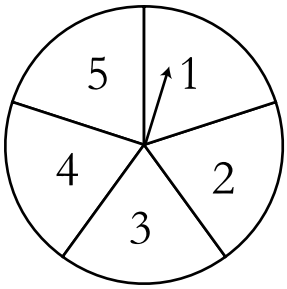
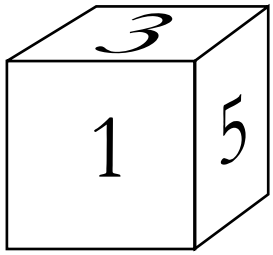
Spinner and Numbered Cube Game





8. Karen and Jim are going to play a game using a spinner (five equal sections) and numbered cube (with numbers 1-6), shown above. The rules of the game for each player's turn are as follows:
   - spin the spinner once
   - roll the numbered cube once
   - add the two results together
   - if the sum is 7, the player wins 1 point; otherwise the player gets 0 points

   a. In the space provided on the next page, create a chart of the sample space (all possible combinations) for one player's turn.

   b. What is the probability of winning 1 point on a turn?

   c. What is the probability of winning 0 points on a turn?

   d. What is the probability of winning 1 point on each of three consecutive turns? Justify your answer.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

8.

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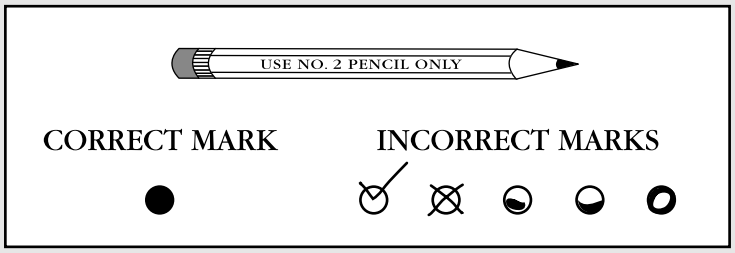
PROFICIENCY AND BEYOND

Kentucky Department of Education

Grade 11

Science

WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



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SCIENCE

Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

1. Acids such as HCl (hydrochloric acid) and H_2SO_4 (sulfuric acid) dissociate (separate into ions in water) completely in solution. The ion that acids have in common and that accounts for their properties is

   ○ H^+.

   ○ SO_4^{-2}.

   ○ Cl^-.

   ○ H_2O.

2. Evidence suggests that 3.5 billion years ago the atmosphere of Earth had almost no oxygen gas. Approximately 1.8 billion years ago, the oxygen concentration is thought to have increased to 15%. Today the oxygen concentration is 20%. What most likely happened between 3.5 and 1.8 billion years ago to increase the amount of oxygen?

   ○ The number of photosynthetic plant species increased.

   ○ The number of animal species increased.

   ○ The amount of water on Earth increased.

   ○ The amount of solar radiation reaching Earth increased.

3. What are two structures that plant cells have and animal cells do not?

   ○ cell wall, chloroplast

   ○ cell membrane, mitochondria

   ○ nuclei, ribosomes

   ○ chloroplast, cell membrane

Turn the page and continue with the next question →

SCIENCE OPEN-RESPONSE QUESTIONS

Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet.

Write your answer to question 4 in the space provided on the next page.

Diffusion

4. The container shown below contains two different solutions with different concentrations of salt. A removable divider separates them. The solution in side A is a 10% salt solution. The solution in side B is a 5% salt solution. The divider is carefully and slowly removed.

Side A
10%
Salt Solution

Side B
5%
Salt Solution

a. Explain what will happen to the contents of the container after a month.

b. Explain, in detail, how and why any changes occur.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

4.

Write your answer to question 5 in the space provided on the next page.

Mid-Ocean Ridges

5. The theory of plate tectonics explains how mid-ocean ridges are formed.
   a. Draw and label a diagram that shows **how** a mid-ocean ridge forms.
   b. Describe **two** possible consequences that the formation of mid-ocean ridges has on other locations on Earth.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

5.

Write your answer to question 6 in the space provided on the next page.

Chemical Reactions and Carbon Dioxide (CO_2) Gas

6. Different kinds of chemical reactions result in the formation of carbon dioxide (CO_2) gas that is released into the atmosphere. These chemical reactions may take place within living organisms or nonliving sources.

   a. Identify a chemical reaction that takes place within living organisms that releases CO_2 into the atmosphere.

   b. Identify a chemical reaction that takes place within nonliving sources that releases CO_2 into the atmosphere.

   CO_2 is constantly being added to and removed from the atmosphere. Extra CO_2 in the atmosphere may contribute to global warming.

   c. Explain why the chemical reactions you described in **part a** and **part b** may now be adding more or less CO_2 to the atmosphere when compared to the past.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

6.

STOP!

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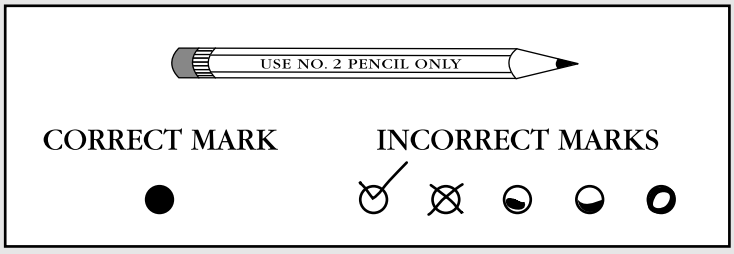
PROFICIENCY AND BEYOND

Kentucky Department of Education

Grade 11
Social Studies

WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



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SOCIAL STUDIES

Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

1. The ability of the Supreme Court to declare an act of Congress, or of the president, unconstitutional is an example of
   - ○ capitalism.
   - ○ states' rights.
   - ○ federalism.
   - ○ judicial review.

2. Which technique was used both by Gandhi, against the British in India, and by Martin Luther King, Jr., in the United States?
   - ○ using aid from foreign nations
   - ○ nonviolent civil disobedience
   - ○ violent revolution
   - ○ organized espionage

3. What U.S. banking institution has the primary responsibility for regulating the country's money supply and setting interest rates?
   - ○ Bank of the United States
   - ○ First Bank of the United States
   - ○ National Banking System
   - ○ Federal Reserve System

4. Which city is important to at least three of the world's major religions?

- ○ Mecca
- ○ Jerusalem
- ○ Rome
- ○ Constantinople

5. The Bolshevik Revolution of 1917 introduced which form of government to Russia?

- ○ communism
- ○ democracy
- ○ fascism
- ○ monarchy

SOCIAL STUDIES OPEN-RESPONSE QUESTIONS

Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet.

Write your answer to question 6 in the space provided on the next page.

Constitutional Rights

6. Constitutional rights in the United States extend to all citizens. The Bill of Rights guarantees:

- freedom of religion
- freedom of speech
- freedom of the press
- the right to assemble and to petition the government
- the right to keep and bear arms
- freedom from unreasonable search and seizure
- the right to due process of law (speedy and fair trial, impartial jury, right to counsel, protection against cruel and unusual punishment)

a. Select **one** of the Constitutional rights listed above that you support **or** that you feel is particularly important. Discuss **two** reasons for your position.

b. Select **one** of the Constitutional rights listed above that you do not support **or** that you feel should be amended. Discuss **two** reasons for your position.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

6.

Write your answer to question 7 in the space provided on the next page.

Reaching Agreement

7. In our schools today, there are often issues about which students, faculty, administrators, and the public hold differing views. These situations often cause conflict.

   a. Identify a situation which can cause conflict in a school.

   b. Explain **two** strategies which can be used to resolve this conflict in a democratic way.

   c. Why would these strategies be effective?

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

7.

Write your answer to question 8 in the space provided on the next page.

Automobile Rebate

8. An automobile manufacturer offers a rebate of $1,000 on the purchase of a new car. This rebate has effects for both the manufacturer and the consumer.

   a. Give an example of **one positive** and **one negative** effect that such rebates have on manufacturers and consumers.

   b. Explain why **each** example is positive or negative for the manufacturer **and** consumer.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

8.

Write your answer to question 9 in the space provided on the next page.

The Great Northern Migration

9. Human migration can be the result of factors that "push" populations from one place or "pull" them to another. In the U.S., between 1910 and 1945, many African Americans migrated from rural southern areas to large northern cities. This migration from the South to the North redistributed America's black population and had lasting social and political effects on the nation.

   a. Describe **two** conditions in the rural southern areas during this time period that caused African Americans to consider migrating to the North.

   b. Describe **two** conditions in northern cities during this time period that attracted African Americans to the North.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

9.

Write your answer to question 10 in the space provided on the next page.

Roaring Twenties

10. In the United States, the decade of the 1920s was a period of great economic growth and social change. It was also, however, a time of great social tension and contradictions. Some of the events and trends of that decade include:

- women were granted the right to vote;
- Prohibition outlawed the manufacture, sale, and consumption of alcoholic beverages;
- the population of urban areas exceeded that of rural areas for the first time in U.S. history;
- quota systems were enacted to restrict immigration;
- modern conveniences, such as automobiles, appliances, and telephones, became more affordable;
- labor strikes occurred as workers demanded shorter workdays and workweeks and general pay increases;
- the Scopes Trial raised a public debate over the teaching of the theory of evolution; and
- the Teapot Dome Scandal tarnished the administration of President Warren G. Harding.

Select **one** of the events or trends listed above. Describe in detail the history or the circumstances surrounding the event or trend which resulted in social change in the United States.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

10.

STOP!

DO NOT MARK ON THIS PAGE

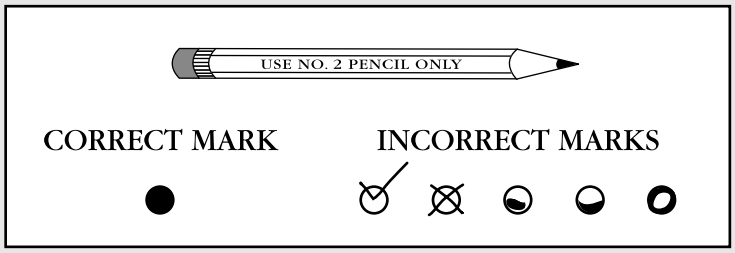
PROFICIENCY AND BEYOND

Kentucky Department of Education

Grade 11

Arts & Humanities

WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



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ARTS & HUMANITIES

Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

1. The Renaissance period was an important period in music history. The term renaissance means
   - ○ recovery
   - ○ rebirth
   - ○ illumination
   - ○ exploration

2. What style of dance would **most** likely portray a story or thematic idea?
   - ○ aerobic dancing
   - ○ line dancing
   - ○ ballet
   - ○ rondo

3. A play may have one or more turning points. The final, deciding turning point is called the
   - ○ climax.
   - ○ dénouement.
   - ○ exposition.
   - ○ soliloquy.

4. Complementary colors are two colors at opposite points on the color wheel. Which colors are complementary?

○ red and orange

○ green and yellow

○ violet and green

○ orange and blue

5. Shakespeare wrote both comedies and tragedies. Which is one of Shakespeare's comic plays?

○ *Romeo and Juliet*

○ *A Midsummer Night's Dream*

○ *Hamlet*

○ *Macbeth*

ARTS & HUMANITIES OPEN-RESPONSE QUESTIONS

Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet.

Write your answer to question 6 in the space provided on the next page.

Time Machine to the 60s

6. You are able to travel through time via a time machine. You choose to travel to the decade of the 1960s because you have a report due for your humanities class. Since your report is about music of that decade, you visit several years during the 1960s to listen to music of that period.

   a. Describe **two** ways that the issues and/or events of the 1960s (for example, the Civil Rights movement, the Vietnam War) affected the music of that time period.

   b. Describe **two** effects that music had on social change and/or people's beliefs in the 1960s.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

6.

Write your answer to question 7 in the space provided on the next page.

Common Dance Elements

7. Different cultures often have different dance styles. One way that the differences in dance styles are expressed is through the dance elements of space, time, and force.

   a. Identify **two** dance styles that are very different from each other and that are from different cultures. Be sure to identify the culture that each of the two dance styles represents.

   b. Describe how **each** of the two dance styles uses the dance elements of space, time, and force. Be specific.

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

7.

Write your answer to question 8 in the space provided on the next page.

Protagonist vs. Antagonist

8. The protagonist and the antagonist are usually the two most important roles in a play or film. In order to be believable in their roles, both the protagonist and the antagonist must have logical motivation (or reasons) for their actions and behavior.

   a. Briefly describe a scene from a play or movie in which the antagonist is opposing the protagonist in some way.

   b. Explain the antagonist's motivation and the protagonist's motivation in the scene.

   c. Create **two** other possible motivations for the actions or behavior of the antagonist and the protagonist in the scene (that is, create two alternative motivations for each character).

Do not write on this page. Please write your answer to this open-response question on the next page. ☞

8.

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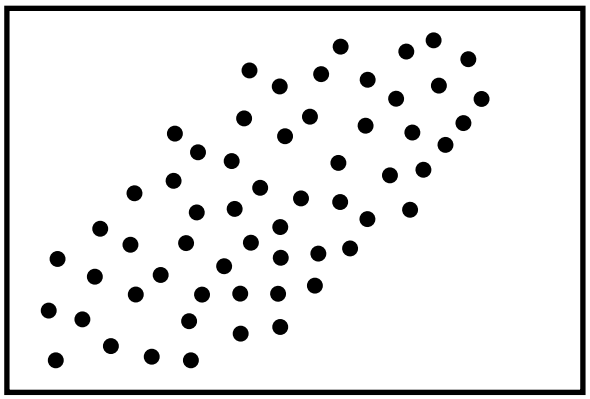
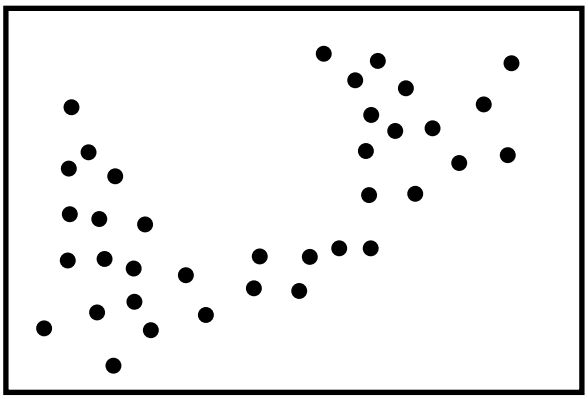
SCORING INFORMATION FOR MATHEMATICS

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

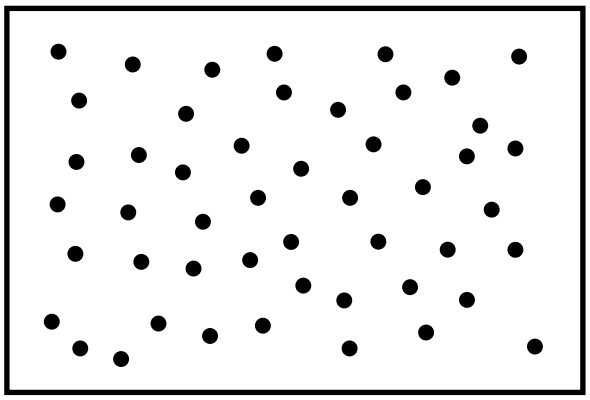
Use the scatter plots below to answer question 1.



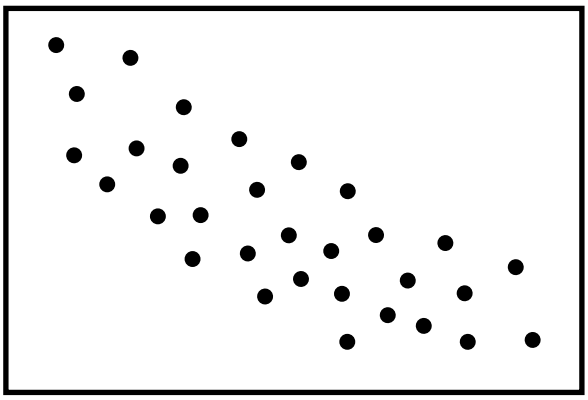
A



B



C



D

1. Which of the scatter plots shown above suggests a strong negative correlation?

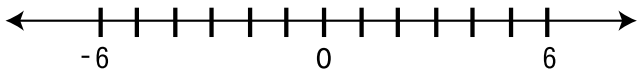
- ○ A
- ○ B
- ○ C
- ● D

Primary Academic Expectation: 2.13 "Students understand and appropriately use statistics and probability."

Primary Core Content Code: 3.1.002 "Students will recognize that curve fitting (linear, quadratic, exponential) can be used as a method of describing and predicting from a set of data or scatter plot. Students will recognize the appropriate curve for a particular set of data."

Percentage of test takers who answered this item correctly in 2003: 66

2. Which number would be the closest to zero on the number line?



○ $\sqrt{2}$

○ -3

○ $\frac{3}{2}$

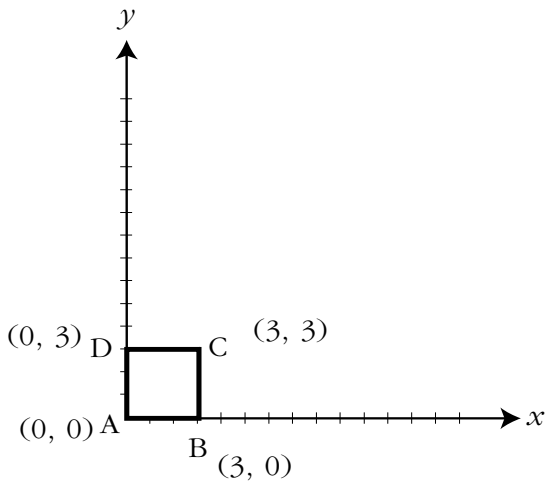
● -1

Primary Academic Expectation: 2.7 "Students understand number concepts and use numbers appropriately and accurately."

Primary Core Content Code: 1.3.001 "Students will understand how the following subsets of real numbers relate to each other: natural, whole, integers, rational, irrational, reals."

Percentage of test takers who answered this item correctly in 2000: 76

3. The diagram below shows four points that form square ABCD.



If square ABCD is transformed by the rule $(x, y) \Rightarrow (2x, 3y)$ into the image A'B'C'D', what type of quadrilateral is image A'B'C'D'?

○ square

● rectangle

○ rhombus

○ trapezoid

Primary Academic Expectation: 2.9 "Students understand space and dimensionality concepts and use them appropriately and accurately."

Primary Core Content Code: 2.3.003 "Students will understand how figures in a coordinate plane and their resulting images under a transformation are algebraically and geometrically related. Students will describe elements that change and elements that do not change under these transformations."

Percentage of test takers who answered this item correctly in 2003: 43

4. Which chart below shows an example of inverse variation?

●

x	2	5	10	20	25	50
y	50	20	10	5	4	2

○

x	-8	-7	-6	-5	-4	-3	-2	-1	0
y	1	1	1	1	2	2	2	3	4

○

x	-8	-6	-4	-2	0	2	4	6
y	4	3	2	1	0	1	2	3

○

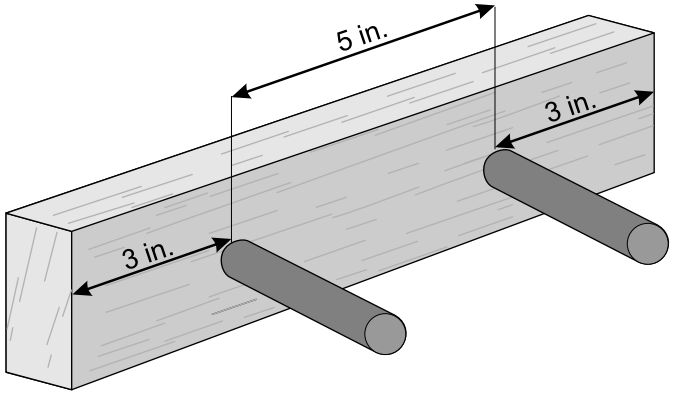
x	1	2	3	4	5	6	7
y	4	8	12	16	20	24	28

Primary Academic Expectation: 2.11 "Students understand mathematical change concepts and use them appropriately and accurately."

Primary Core Content Code: 4.1.005 "Students will apply direct and inverse variation to both real-world and mathematical problems."

Percentage of test takers who answered this item correctly in 2001: 26

Wooden Peg Racks



2-peg rack

5. You work in a factory that makes wooden craft items. Your job is to assemble kits for wooden peg racks. Each rack contains 1 to 12 pegs. There must be a distance of 5 inches from the center of one peg to the center of the next peg and a distance of 3 inches from the end of the rack to the center of the nearest peg.

   a. Make a table showing the wood lengths needed for racks containing 1 peg, 2 pegs, 3 pegs, and 4 pegs.

   b. What is the wood length of a rack with 7 pegs? Show your procedure.

   c. Create a rule that will determine how long the wood length must be to make a rack holding n pegs.

Primary Academic Expectation: 2.8 "Students understand various mathematical procedures and use them appropriately and accurately."

Primary Core Content Code: 1.2.004 "Students will determine a specific term of a sequence given an explicit formula and write an explicit rule for the nth term of arithmetic and geometric sequences."

Secondary Academic Expectation: 2.8 "Students understand various mathematical procedures and use them appropriately and accurately."

Secondary Core Content Code: 4.2.004 "Students will create tables of numerical values of functions including linear, quadratic, absolute value, exponential, and simple piecewise such as some long distance phone rates."

Percentage of test takers in 2003 who received

- a score of 4: 26
- a score of 3: 22
- a score of 2: 15
- a score of 1: 14
- a score of 0: 21

Percentage of blank responses: 2

Scoring Guide

SCORE	DESCRIPTION
4	Student scores 4 points.
3	Student scores 3 – 3.5 points.
2	Student scores 2 – 2.5 points.
1	Student scores .5 – 1.5 points. **OR** Student demonstrates minimal understanding (e.g., student determines board length for one peg rack).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Score Points

Part a:
score 1 point correct table with correct entries
OR
score .5 point incorrect answers due to a calculation error

Part b:
score 1 point correct answer
AND
score 1 point correct work shown
OR
score .5 point incomplete work shown

Part c:
score 1 point correct rule or equivalent expression

Note: A "4" response may not have any incorrect labels.

Correct Answers

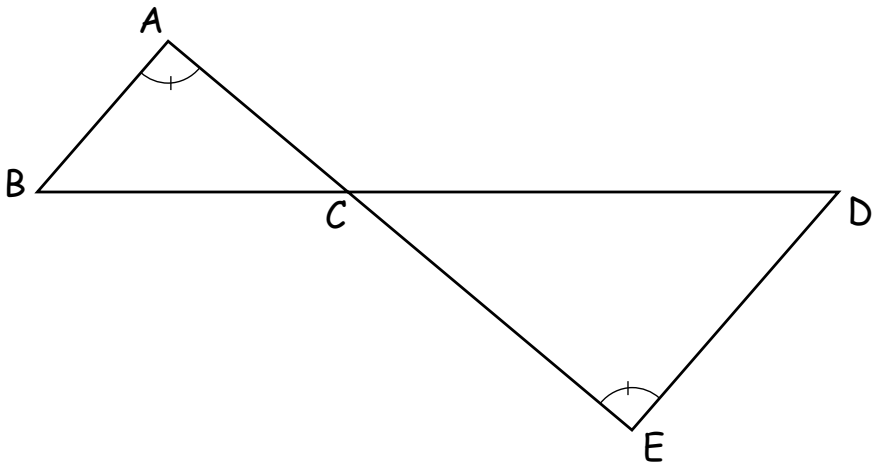
Part a:

Pegs	Length
1	6
2	11
3	16
4	21

Part b: 36
$3 + 5 + 5 + 5 + 5 + 5 + 5 + 3 = 36$; or a labeled diagram

Part c: $6 + 5(n - 1)$; or $5n + 1$; or equivalent

Similar Triangles



6. In her geometry class, Karen constructed the figure above in which $\overleftrightarrow{AB}$ is parallel to $\overleftrightarrow{ED}$ and $\angle A \cong \angle E$. The two triangles in the figure are similar.
   a. Name the two similar triangles (with vertices in correct order).
   b. Explain why the two triangles are similar.
   c. What is the measure of y? Show your procedure.

Primary Academic Expectation: 2.9 "Students understand space and dimensionality concepts and use them appropriately and accurately."

Primary Core Content Code: 2.2.005 "Students will apply the concepts of congruence and similarity to solve real-world and mathematical problems (not including proofs)."

Secondary Academic Expectation: 2.9 "Students understand space and dimensionality concepts and use them appropriately and accurately."

Secondary Core Content Code: 2.1.003 "Students will define, describe properties of, give examples of, and apply to both real-world and mathematical situations angle relationships such as linear pairs, vertical, complementary, supplementary, corresponding, and alternate interior angles."

Tertiary Academic Expectation: 2.8 "Students understand various mathematical procedures and use them appropriately and accurately."

Tertiary Core Content Code: 1.3.004 "Students will understand how ratio and proportion can be used in a variety of mathematical contexts and to solve real-world problems."

Percentage of test takers in 2003 who received

- a score of 4: 4
- a score of 3: 6
- a score of 2: 7
- a score of 1: 31
- a score of 0: 48

Percentage of blank responses: 4

Scoring Guide

SCORE	DESCRIPTION
4	Student scores 4 points.
3	Student scores 2.5 – 3.5 points.
2	Student scores 1.5 – 2 points.
1	Student scores .5 – 1 point. **OR** Student demonstrates minimal understanding (e.g., student identifies vertical angles).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Score Points

Part a:

score 1 point — correct answer showing the correct order of corresponding vertices

Part b:

score 1 point — student shows that at least two pairs of corresponding angles are congruent

OR

score .5 point — student only explains AA Theorem or equivalent

Part c:

score 1 point — correct answer: $y \approx 9.5$ or $y = \sqrt{90}$ or $y = 3\sqrt{10}$

AND

score 1 point — correct procedure shown

OR

incorrect answer due to a calculation error; however, the procedure is correct

Correct Answers

Part a: $\Delta ACB \sim \Delta ECD$

Note: There are six possible ways to correctly name the two similar triangles.

Part b: $\angle A \cong \angle E$ given $\angle ACB \cong \angle ECD$ vertical angles
AA similarity theorem

Part c: $\frac{y}{6} = \frac{15}{y} \quad y^2 = 90 \quad y = \sqrt{90} = 3\sqrt{10} \approx 9.5$

Note: Reasoning does not have to be in the form of a two-column proof to be correct.

7. The Hardwood Furniture Company manufactures small tables and chairs. It costs \$30 to make each table and \$20 to make each chair. The amount available to produce all the tables and chairs in one week is \$1,200. Let t represent the number of tables produced and c represent the number of chairs produced.
   a. The equation for the cost of making furniture for one week is $30t + 20c = 1{,}200$. On the grid on the next page, construct a graph of this equation (with correct labels and scales).
   b. The Hardwood Furniture Company always produces two chairs with each table. Write an equation that represents the number of chairs (c) in terms of the number of tables (t). Graph and label this equation on the same grid used for **part a**.
   c. Determine the number of tables and chairs the Hardwood Furniture Company can produce per week based on the production costs and the amount of money available (i.e., \$1,200). Round the answer appropriately.
   d. Explain how the answer to **part c** is indicated on the graph.

Primary Academic Expectation: 2.8 "Students understand various mathematical procedures and use them appropriately and accurately."

Primary Core Content Code: 4.2.003 "Students will solve systems of linear equations (2 equations in 2 variables) including systems that arise from real-world problems."

Percentage of test takers in 2000 who received

a score of 4: 1

a score of 3: 2

a score of 2: 3

a score of 1: 29

a score of 0: 58

Percentage of blank responses: 7

Scoring Guide

SCORE	DESCRIPTION
4	Student scores 4 points.
3	Student scores 3 – 3.5 points.
2	Student scores 2 – 2.5 points.
1	Student scores .5 – 1.5 points. **OR** Student demonstrates minimal understanding (e.g., student correctly graphs at least two points).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Score Points

Part a:
score 1 point correct graph
OR
score .5 point graph with one error or missing scales or labels

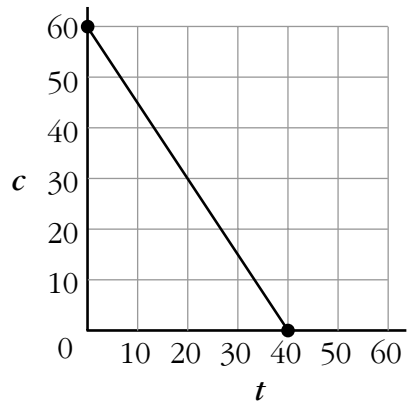
Part b:
score .5 point correct equation
AND
score .5 point correct graph based on the equation given

Part c:
score 1 point .5 point each for correct number of tables and chairs
OR
score .5 point incorrect answers worked correctly from answers given in part a and part b
OR
incorrect answer(s) due to a calculation error or rounding

Part d:
score 1 point correct answer

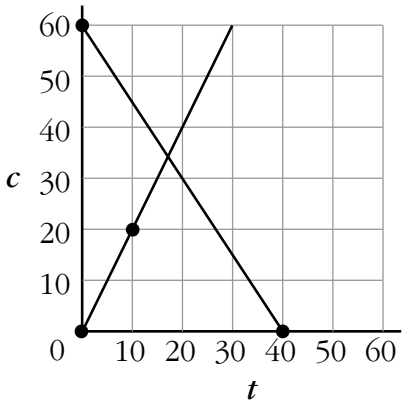
Correct Answers

Part a:



or equivalent graph with axes reversed

Part b: $c = 2t$, or $t = (1/2)c$; the line should be added to the graph of part a as shown here:



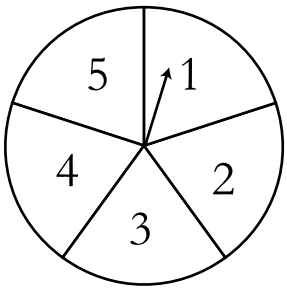
Part c: tables = 17, and chairs = 34; using $c = 2t$ and

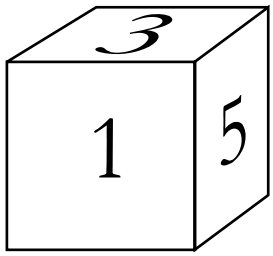
or "17 sets of tables and chairs"

$30t + 20c = 1200$
$30t + 20(2t) = 1200$
$70t = 1200$
$t \approx 17.14$
$c \approx 2(17.14) \approx 34.28$

Part d: This is (or is approximately) where the lines intersect.

Spinner and Numbered Cube Game





8. Karen and Jim are going to play a game using a spinner (five equal sections) and numbered cube (with numbers 1-6), shown above. The rules of the game for each player's turn are as follows:

   - spin the spinner once
   - roll the numbered cube once
   - add the two results together
   - if the sum is 7, the player wins 1 point; otherwise the player gets 0 points

   a. In the space provided on the next page, create a chart of the sample space (all possible combinations) for one player's turn.

   b. What is the probability of winning 1 point on a turn?

   c. What is the probability of winning 0 points on a turn?

   d. What is the probability of winning 1 point on each of three consecutive turns? Justify your answer.

Primary Academic Expectation: 2.13 "Students understand and appropriately use statistics and probability."

Primary Core Content Code: 3.2.004 "Students will interpret the results of a probability simulation, draw conclusions, and make predictions."

Percentage of test takers in 2002 who received

a score of 4: 6

a score of 3: 5

a score of 2: 36

a score of 1: 21

a score of 0: 30

Percentage of blank responses: 2

Scoring Guide

SCORE	DESCRIPTION
4	Student scores 5 points.
3	Student scores 3.5 – 4.5 points.
2	Student scores 2 – 3 points.
1	Student scores .5 – 1.5 points. **OR** Student demonstrates minimal understanding (e.g., student provides combinations that total 7).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Score Points

Part a:
score 1 point correct chart (any correct representation of sample space)
OR
score .5 point chart with no more than 3 calculation errors

Part b:
score 1 point correct answer based on chart given in part a
AND
score .5 point incorrect answer due to a calculation error

Part c:
score 1 point correct answer based on chart given in part a or answer given in part b
OR
score .5 point incorrect answer due to a calculation error

Part d:
score 1 point correct answer based on chart given in part a or answer given in part b
OR
score .5 point incorrect answer due to a calculation error
AND
score 1 point correct and complete justification
OR
score .5 point incomplete justification

Correct Answers

Part a: (sample answer)

	1	**2**	**3**	**4**	**5**	**6**
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11

Part b: $\frac{1}{6}$ or equivalent fraction, decimal, or percent (i.e., 17%)

Part c: $\frac{5}{6}$ or equivalent fraction, decimal, or percent (i.e., 83%)

Part d: $\frac{1}{216}$ or equivalent fraction, decimal, or percent (i.e., 0.5%) $\left(\frac{1}{6}\right)\left(\frac{1}{6}\right)\left(\frac{1}{6}\right)$

SCORING INFORMATION FOR SCIENCE

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

1. Acids such as HCl (hydrochloric acid) and H_2SO_4 (sulfuric acid) dissociate (separate into ions in water) completely in solution. The ion that acids have in common and that accounts for their properties is

   ● H^+.

   ○ SO_4^{-2}.

   ○ Cl^-.

   ○ H_2O.

   Primary Academic Expectation: 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

   Primary Core Content Code: 1.2.001 "Atoms interact with each other by transferring or sharing outermost electrons. These outer electrons govern the chemical properties of the element."

   Secondary Academic Expectation: 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

   Secondary Core Content Code: 1.2.003 "Bonds between atoms are created when outer electrons are paired by being transferred or shared. A compound is formed when two or more kinds of atoms bind together chemically."

   Percentage of test takers who answered this item correctly in 2003: 66

2. Evidence suggests that 3.5 billion years ago the atmosphere of Earth had almost no oxygen gas. Approximately 1.8 billion years ago, the oxygen concentration is thought to have increased to 15%. Today the oxygen concentration is 20%. What most likely happened between 3.5 and 1.8 billion years ago to increase the amount of oxygen?

● The number of photosynthetic plant species increased.

○ The number of animal species increased.

○ The amount of water on Earth increased.

○ The amount of solar radiation reaching Earth increased.

Primary Academic Expectation: 2.3 "Students identify and analyze systems and the ways their components work together or affect each other."

Primary Core Content Code: 2.3.004 "Evidence for one-celled forms of life, the bacteria, extends back more than 3.5 billion years. The changes in life over time caused dramatic changes in the composition of the Earth's atmosphere, which did not originally contain oxygen."

Percentage of test takers who answered this item correctly in 2003: 69

3. What are two structures that plant cells have and animal cells do not?

● cell wall, chloroplast

○ cell membrane, mitochondria

○ nuclei, ribosomes

○ chloroplast, cell membrane

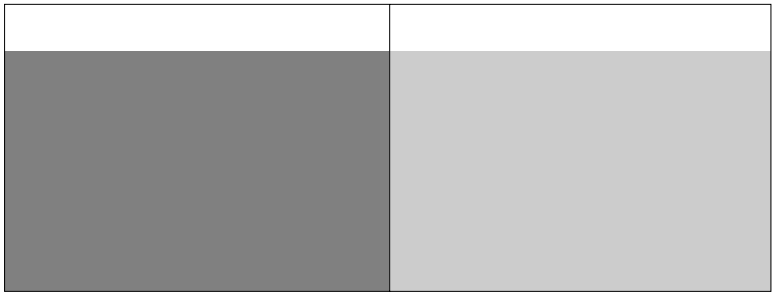
Primary Academic Expectation: 2.3 "Students identify and analyze systems and the ways their components work together or affect each other."

Primary Core Content Code: 3.1.001 "Cells have particular structures that underlie their function. Every cell is surrounded by a membrane that separates it from the outside world. Inside the cell is a concentrated mixture of thousands of different molecules that form a variety of specialized structures. These structures carry out specific cell functions."

Percentage of test takers who answered this item correctly in 2003: 59

Diffusion

4. The container shown below contains two different solutions with different concentrations of salt. A removable divider separates them. The solution in side A is a 10% salt solution. The solution in side B is a 5% salt solution. The divider is carefully and slowly removed.



Side A
10%
Salt Solution

Side B
5%
Salt Solution

a. Explain what will happen to the contents of the container after a month.

b. Explain, in detail, how and why any changes occur.

Primary Academic Expectation: 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

Primary Core Content Code: 1.2.004 "The physical properties of compounds reflect the nature of the interactions among molecules. These interactions are determined by the structure of the molecule including the constituent atoms."

Secondary Academic Expectation: 2.5 "Students understand that under certain conditions nature tends to remain the same or move toward a balance."

Secondary Core Content Code: 1.2.005 "Solids, liquids, and gases differ in the distances between molecules or atoms and therefore the energy that binds them together. In solids, the structure is nearly rigid; in liquids, molecules or atoms move around each other but do not move apart; and in gases, molecules or atoms move almost independently of each other and are relatively far apart."

Percentage of test takers in 2003 who received

a score of 4: 1

a score of 3: 4

a score of 2: 17

a score of 1: 34

a score of 0: 37

Percentage of blank responses: 7

Scoring Guide

SCORE	DESCRIPTION
4	Student clearly explains, based on the law of diffusion, what will happen to the contents of the container after a month.
3	Student generally explains, based on the law of diffusion, what will happen to the contents of the container after a month. The response may reflect minor errors or misconceptions.
2	Student provides a limited explanation, which may not be based on the law of diffusion, of what will happen to the contents of the container after a month. The response may reflect errors or misconceptions.
1	Student demonstrates minimal understanding (e.g., student provides an explanation that is partially correct but reflects major errors or misconceptions).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Science Behind the Question:
The law of diffusion states that particles move from areas of high concentration to areas of low concentration until they reach equilibrium. If you put a sugar cube in a glass of water, the cube will dissolve and then move through the water by molecular motion until the sugar concentration is the same in all parts of the glass. The warmer the water and the more stirring that takes place, the faster this equilibrium will be reached. Diffusion takes place in solids, liquids, and gasses.

Mid-Ocean Ridges

5. The theory of plate tectonics explains how mid-ocean ridges are formed.
   a. Draw and label a diagram that shows **how** a mid-ocean ridge forms.
   b. Describe **two** possible consequences that the formation of mid-ocean ridges has on other locations on Earth.

Primary Academic Expectation: 2.4 "Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed."

Primary Core Content Code: 2.1.002 "The outward transfer of Earth's internal heat drives convection circulation in the mantle. This causes the crustal plates to move on the face of the Earth."

Secondary Academic Expectation: 2.3 "Students identify and analyze systems and the ways their components work together or affect each other."

Secondary Core Content Code: 2.1.002 "The outward transfer of Earth's internal heat drives convection circulation in the mantle. This causes the crustal plates to move on the face of the Earth."

Tertiary Academic Expectation: 2.6 "Students understand how living and nonliving things change over time and the factors that influence the changes."

Tertiary Core Content Code: 2.1.002 "The outward transfer of Earth's internal heat drives convection circulation in the mantle. This causes the crustal plates to move on the face of the Earth."

Percentage of test takers in 2003 who received

a score of 4: 1

a score of 3: 4

a score of 2: 27

a score of 1: 29

a score of 0: 30

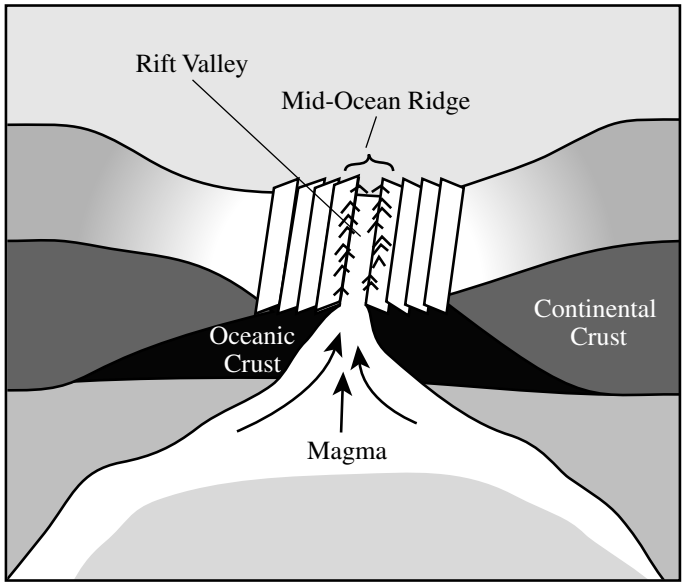
Percentage of blank responses: 9

Scoring Guide

SCORE	DESCRIPTION
4	Student draws and labels a diagram (or provides a combination of a diagram and text) that clearly shows how a mid-ocean ridge forms. Student clearly describes two possible consequences that the formation of mid-ocean ridges has on other locations on Earth.
3	Student draws and labels a diagram (or provides a combination of diagram and text) that generally shows how a mid-ocean ridge forms. Student generally describes two possible consequences that the formation of mid-ocean ridges has on other locations on Earth. **OR** Student draws and labels a diagram (or provides a combination of diagram and text) that generally shows how a mid-ocean ridge forms. Student clearly describes one possible consequence that the formation of mid-ocean ridges has on other locations on Earth.
2	Student draws a diagram (or provides a combination of diagram and text) that shows in a limited way how a mid-ocean ridge forms. Student lists or provides a limited description of one or two possible consequences that the formation of mid-ocean ridges has on other locations on Earth. **OR** Student draws and labels a diagram (or provides a combination of diagram and text) that generally shows how a mid-ocean ridge forms. Response to part b is missing or incorrect. **OR** Student generally describes two possible consequences that the formation of mid-ocean ridges has on other locations on Earth. Response to part a is missing or incorrect.
1	Student demonstrates minimal understanding (e.g., student draws a diagram, with or without text, that shows in a limited way how a mid-ocean ridge forms **or** student lists one or two possible consequences that the formation of mid-ocean ridges has on other locations on Earth).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Science Behind the Question:

Part a—See diagram below. The three fundamental elements that should be shown in a clear response are:
- upwelling magma
- formation of crust as lava solidifies
- spreading crust on both sides of the ridge



Optional items are the rift valley and the continental crusts.

Part b—Examples of consequences:
- **Continental drift movement** (i.e., continents move away from one another and toward other continents)
- **Folding, mountain building** as the continental crust is pushed upward
- **Earthquakes and fault zones** on the continents as a result of resistance to this motion
- **Volcanoes occuring along the continental boundary** as a result of the uplift developing cracks that magma can penetrate (hence the familiar Pacific "Ring of Fire")
- **Tsunamis** resulting from undersea earthquakes (sudden movement as the spreading creates crustal strain buildup)
- **Volcanoes occuring mid-ocean** near the ridge if the magma upwelling becomes more rapid, resulting in mid-ocean island formation

Chemical Reactions and Carbon Dioxide (CO_2) Gas

6. Different kinds of chemical reactions result in the formation of carbon dioxide (CO_2) gas that is released into the atmosphere. These chemical reactions may take place within living organisms or nonliving sources.

   a. Identify a chemical reaction that takes place within living organisms that releases CO_2 into the atmosphere.

   b. Identify a chemical reaction that takes place within nonliving sources that releases CO_2 into the atmosphere.

   CO_2 is constantly being added to and removed from the atmosphere. Extra CO_2 in the atmosphere may contribute to global warming.

   c. Explain why the chemical reactions you described in **part a** and **part b** may now be adding more or less CO_2 to the atmosphere when compared to the past.

Primary Academic Expectation: 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

Primary Core Content Code: 3.5.001 "Atoms (e.g., carbon, nitrogen) and molecules (e.g., water) cycle among the living and nonliving components of the biosphere."

Secondary Academic Expectation: 2.3 "Students identify and analyze systems and the ways their components work together or affect each other."

Secondary Core Content Code: 2.3.003 "Interactions among the solid Earth, the oceans, the atmosphere, and living things have resulted in the ongoing development of a changing Earth system. Earthquakes and volcanic eruptions can be observed on a human time scale, but many processes, such as mountain building and plate movements, take place over hundreds of millions of years."

Tertiary Academic Expectation: 2.5 "Students understand that under certain conditions nature tends to remain the same or move toward a balance."

Tertiary Core Content Code: 3.6.002 "The chemical bonds of food molecules contain energy. Energy is released when the bonds of food molecules are broken and new compounds with lower energy bonds are formed. Cells usually store this energy temporarily in the phosphate bonds of ATP. During the process of cellular respiration, some energy is lost as heat."

Percentage of test takers in 2003 who received

a score of 4: 3

a score of 3: 21

a score of 2: 33

a score of 1: 19

a score of 0: 14

Percentage of blank responses: 10

Scoring Guide

SCORE	DESCRIPTION
4	Student clearly identifies one chemical reaction that takes place within living organisms that releases CO_2, and one chemical reaction that takes place within a nonliving source that releases CO_2. Student clearly explains why these chemical reactions may now be adding more or less CO_2 in the atmosphere when compared to the past.
3	Student generally identifies one chemical reaction that takes place within living organisms that releases CO_2 and one chemical reaction that takes place within a nonliving source that releases CO_2. Student generally explains why these chemical reactions may now be adding more or less CO_2 in the atmosphere when compared to the past. The response may contain minor errors or misconceptions.
2	Student gives a limited response to at least two parts of the question (a chemical reaction that takes place within living organisms that releases CO_2; a chemical reaction that takes place within a nonliving source that releases CO_2; an explanation of why the quantity of CO_2 in the atmosphere may be changing).
1	Student demonstrates minimal understanding (e.g., student identifies only one chemical reaction with no explanation of why the quantity of CO_2 in the atmosphere may be changing).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Science Behind the Question:
Almost all living organisms release carbon dioxide following cellular respiration, in which glucose is converted to water and carbon dioxide as a source of energy. Many substances are burned to give energy. Major chemical reactions that produce CO_2 from nonliving sources would include combustion of natural gas, coal, and oil, and the products made from those sources (such as plastics and gasoline). Recent biomass (wood and plants) is also burned, releasing carbon dioxide. The release of carbon that has been stored in fossil fuels and in large rainforests by combusting them in fires or automobiles, etc., has the effect of adding more CO_2 to the atmosphere. Increased algae or plant life may compensate somewhat by adding more biomass to do photosynthesis, but the increasing human population using more fossil fuels as energy sources is adding a net gain to the atmosphere's CO_2 concentration.

SCORING INFORMATION FOR SOCIAL STUDIES

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

1. The ability of the Supreme Court to declare an act of Congress, or of the president, unconstitutional is an example of

   ○ capitalism.

   ○ states' rights.

   ○ federalism.

   ● judicial review.

   Primary Academic Expectation: 2.15 "Students can accurately describe various forms of government and analyze issues that relate to the rights and responsibilities of citizens in a democracy."

   Primary Core Content Code: 1.2.001 "Powers of government are distributed and shared among levels and branches to reflect the 'common good' (e.g., Congress legislates on behalf of the people; the President represents the people as a nation; the Supreme Court acts on behalf of the people as a whole when it interprets the Constitution)."

   Secondary Academic Expectation: 2.15 "Students can accurately describe various forms of government and analyze issues that relate to the rights and responsibilities of citizens in a democracy."

   Secondary Core Content Code: 1.2.002 "The principles of limited government (e.g., rule of law, federalism, checks and balances, majority rule, protection of minority rights) protect individual rights and promote the 'common good.'"

   Percentage of test takers who answered this item correctly in 2001: 52

2. Which technique was used both by Gandhi, against the British in India, and by Martin Luther King, Jr., in the United States?

○ using aid from foreign nations

● nonviolent civil disobedience

○ violent revolution

○ organized espionage

Primary Academic Expectation: 2.16 "Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups."

Primary Core Content Code: 2.4.001 "As cultures emerge and develop, conflict and competition (e.g., violence, difference of opinion, stereotypes, prejudice, discrimination, genocide) may occur."

Secondary Academic Expectation: 2.20 "Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective."

Secondary Core Content Code: 5.2.006 "After World War II, America experienced economic growth (e.g., surburban growth); struggles for racial and gender equality (e.g., Civil Rights Movement), the extension of civil liberties, and conflict over political issues (e.g., McCarthyism, U.S. involvement in Vietnam)."

Percentage of test takers who answered this item correctly in 2003: 80

3. What U.S. banking institution has the primary responsibility for regulating the country's money supply and setting interest rates?

○ Bank of the United States

○ First Bank of the United States

○ National Banking System

● Federal Reserve System

Primary Academic Expectation: 2.18 "Students understand economic principles and are able to make economic decisions that have consequences in daily living."

Primary Core Content Code: 3.2.002 "Economic institutions include such organizations as corporations, labor unions, banks, stock markets, cooperatives, and partnerships."

Percentage of test takers who answered this item correctly in 2003: 61

4. Which city is important to at least three of the world's major religions?

○ Mecca

● Jerusalem

○ Rome

○ Constantinople

Primary Academic Expectation: 2.19 "Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations."

Primary Core Content Code: 4.2.001 "Places and regions serve as meaningful symbols for individuals and societies (e.g., Jerusalem, Vietnam Memorial, Ellis Island, the Appalachian region)."

Percentage of test takers who answered this item correctly in 2003: 72

5. The Bolshevik Revolution of 1917 introduced which form of government to Russia?

● communism

○ democracy

○ fascism

○ monarchy

Primary Academic Expectation: 2.20 "Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective."

Primary Core Content Code: 5.3.004 "Nationalism, militarism, and imperialism led to world conflicts, economic booms and busts, and the rise of totalitarian governments."

Secondary Academic Expectation: 2.20 "Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective."

Secondary Core Content Code: 5.1.003 "Cause-and-effect relationships can be analyzed by looking at multiple causation (e.g., individual influences, ideas and beliefs, technology, resources)."

Percentage of test takers who answered this item correctly in 2003: 58

Constitutional Rights

6. Constitutional rights in the United States extend to all citizens. The Bill of Rights guarantees:

   - freedom of religion
   - freedom of speech
   - freedom of the press
   - the right to assemble and to petition the government
   - the right to keep and bear arms
   - freedom from unreasonable search and seizure
   - the right to due process of law (speedy and fair trial, impartial jury, right to counsel, protection against cruel and unusual punishment)

   a. Select **one** of the Constitutional rights listed above that you support **or** that you feel is particularly important. Discuss **two** reasons for your position.

   b. Select **one** of the Constitutional rights listed above that you do not support **or** that you feel should be amended. Discuss **two** reasons for your position.

Primary Academic Expectation: 2.15 "Students can accurately describe various forms of government and analyze issues that relate to the rights and responsibilities of citizens in a democracy."

Primary Core Content Code: 1.1.002 "Democratic governments preserve and protect the rights and liberties of their constituents through different sources (e.g., U.N. Charter, Declaration of the Rights of Man, U.N. Declaration of Human Rights, U.S. Constitution)."

Percentage of test takers in 2003 who received

a score of 4: 9

a score of 3: 31

a score of 2: 34

a score of 1: 18

a score of 0: 5

Percentage of blank responses: 3

Scoring Guide

SCORE	DESCRIPTION
4	Student selects one Constitutional right and clearly discusses two reasons that right is important. Student selects one other Constitutional right and clearly discusses two reasons that right should be amended.
3	Student selects one Constitutional right and generally discusses one or two reasons that right is important. Student selects one other Constitutional right and generally discusses one or two reasons that right should be amended. Response must include a total of at least three reasons.
2	Student selects one Constitutional right and provides a limited discussion of one reason that right is important. Student selects one other Constitutional right and provides a limited discussion of one reason that right should be amended. **OR** Student selects one Constitutional right and provides a limited discussion of two reasons that right is important **or** two reasons that right should be amended.
1	Student demonstrates minimal understanding (e.g., student selects one Constitutional right and provides a limited discussion of one reason that right is important or one reason that right should be amended).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of reasons in support of Constitutional rights:

- Freedom of Religion—Without this right, some people would be discriminated against because of their religious beliefs; nobody (particularly employers or the government) should be allowed to tamper with someone's personal beliefs; separation of church and state requires that government take a "hands off" approach to religion; religious division is the source of much violence (in this country—especially historically—and abroad in some notable areas, e.g., Middle East, Serbia/Bosnia)
- Freedom of Speech—This right is a cornerstone of democracy; censorship stifles the richness of a marketplace of ideas; it is a necessary requirement to bring about change; it is a right to protest
- Freedom of the Press—This right is important because it ensures alternative viewpoints and allows for critique of the government and other institutions; reasons similar to freedom of speech also apply
- Right to Assemble/Petition the Government—This is important to maintain a healthy government/democracy; checks government power/abuse
- Right to Bear Arms—Important for home/personal protection; firearms are used for sport/recreation; a limit to government power
- Freedom from Unreasonable Search and Seizure—This protects individual privacy and checks government abuse/power; supports our legal system
- The Right to Due Process—This right ensures presumption of innocence, the right to a lawyer, the right to a fair trial, provides that the accused cannot languish in jail, and that punishments fit the crimes (fair and appropriate, not cruel and unusual)

Examples of reasons not to support Constitutional rights:

- Freedom of Religion—Some people do not agree with the division of church and state
- Freedom of Speech—Hate speech is protected; individuals are often slandered; in times of war, free speech could undermine war efforts
- Freedom of the Press—Authors often libel individuals
- The Right to Assemble/Petition the Government—Allows groups like the KKK to assemble in public; can escalate into violence
- The Right to Bear Arms—Americans are too armed; too many acts of violence involve guns; this right was relevant in the 18th century, but isn't now
- Freedom from Unreasonable Search and Seizure—The guilty are cleared of wrongdoing by procedural technicalities; limits the effectiveness of law enforcement
- The Right to Due Process—Our current system is too slow with too many appeals; the accused have too many rights and get off too easily; juries are rarely impartial (race and class are important factors); state-appointed lawyers are sometimes incompetent

7. In our schools today, there are often issues about which students, faculty, administrators, and the public hold differing views. These situations often cause conflict.

   a. Identify a situation which can cause conflict in a school.

   b. Explain **two** strategies which can be used to resolve this conflict in a democratic way.

   c. Why would these strategies be effective?

Primary Academic Expectation: 2.16 "Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups."

Primary Core Content Code: 2.4.002 "Compromise and cooperation are characteristics that may influence social interaction (e.g., peace studies, treaties, conflict resolution)."

Percentage of test takers in 2003 who received

a score of 4: 6

a score of 3: 34

a score of 2: 39

a score of 1: 15

a score of 0: 3

Percentage of blank responses: 3

Scoring Guide

SCORE	DESCRIPTION
4	Student identifies a situation which can cause conflict in school. Student clearly explains two strategies which can be used to resolve this conflict in a democratic way and clearly explains why these strategies would be effective.
3	Student identifies a situation which can cause conflict in school. Student generally explains two strategies which can be used to resolve this conflict in a democratic way and generally explains why these strategies would be effective.
2	Student identifies a situation which can cause conflict in school. Student gives a limited explanation of one strategy which can be used to resolve this conflict in a democratic way and a limited explanation why this strategy would be effective. **OR** Student identifies a situation which can cause conflict in school and generally explains two strategies which can be used to resolve this conflict in a democratic way, without explaining why the strategies would be effective. **OR** Student generally explains two strategies which can be used to resolve conflict in a democratic way and generally explains why these strategies would be effective without identifying a situation which can cause conflict in school.
1	Student demonstrates minimal understanding (e.g., student identifies a situation which can cause conflict in school and explains one strategy which can be used to resolve this conflict in a democratic way, with no explanation why the strategy would be effective).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of situations which can cause conflict in school:

- School uniforms/dress code
- Racism
- Sexual harassment
- Gang violence
- Weapons
- Smoking
- Grades and sports
- Teacher/student disagreements
- Prayer in school
- Drugs/drinking
- Appropriateness of certain films or books in the classroom

Examples of strategies which can be used to resolve conflict in a democratic way:

- Peer mediation
- Student body vote/student council
- PTA
- Counselor mediation
- Petition
- Appeal to school board

Automobile Rebate

8. An automobile manufacturer offers a rebate of $1,000 on the purchase of a new car. This rebate has effects for both the manufacturer and the consumer.

   a. Give an example of **one positive** and **one negative** effect that such rebates have on manufacturers and consumers.

   b. Explain why **each** example is positive or negative for the manufacturer **and** consumer.

Primary Academic Expectation: 2.18 "Students understand economic principles and are able to make economic decisions that have consequences in daily living."

Primary Core Content Code: 3.1.003 "To make informed choices, consumers must analyze advertisements, consider personal finances (including the importance of savings, investment, and use of credit), and examine opportunity cost."

Secondary Academic Expectation: 2.18 "Students understand economic principles and are able to make economic decisions that have consequences in daily living."

Secondary Core Content Code: 3.3.002 "Specific financial and non-financial incentives often influence individuals differently (e.g., discounts, sales promotions, trends, personal convictions)."

Percentage of test takers in 2002 who received

a score of 4: 5

a score of 3: 30

a score of 2: 38

a score of 1: 17

a score of 0: 8

Percentage of blank responses: 2

Scoring Guide

SCORE	DESCRIPTION
4	Student provides one positive and one negative effect that rebates have on manufacturers and consumers. Student clearly explains why each effect is positive or negative for the manufacturer and consumer.
3	Student provides one positive and one negative effect that rebates have on manufacturers and consumers. Student generally explains why each effect is positive or negative for the manufacturer and consumer. (One effect may be missing for either the manufacturer or the consumer.)
2	Student provides one positive and one negative effect that rebates have on manufacturers **or** consumers and gives a limited explanation of why each effect is positive or negative. **OR** Student provides one positive **or** one negative effect that rebates have on manufacturers and consumers and gives a limited explanation of why each effect is positive or negative.
1	Student demonstrates minimal understanding (e.g., student provides one positive and/or one negative effect that rebates have on manufacturers and/or consumers with no explanation).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of positive effects that rebates have on the manufacturer:
- Attract more business
- Sell more cars
- Good advertising/public relations

Examples of positive effects that rebates have on the consumer:
- More affordable car
- Cheaper monthly payments

Examples of negative effects that rebates have on the manufacturer:
- Lose $1,000 per car sold
- Customers may expect a rebate in the future

Examples of negative effects that rebates have on the consumer:
- May not “need” a car, but will buy one anyway
- May not be able to negotiate price
- Assume that it’s a good deal when price may have been inflated

9. Human migration can be the result of factors that "push" populations from one place or "pull" them to another. In the U.S., between 1910 and 1945, many African Americans migrated from rural southern areas to large northern cities. This migration from the South to the North redistributed America's black population and had lasting social and political effects on the nation.

   a. Describe **two** conditions in the rural southern areas during this time period that caused African Americans to consider migrating to the North.

   b. Describe **two** conditions in northern cities during this time period that attracted African Americans to the North.

Primary Academic Expectation: 2.19 "Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations."

Primary Core Content Code: 4.3.001 "Humans tend to settle in or near urban areas, depending on the availability of resources (e.g., jobs, markets, industry); therefore, urban areas vary in size, arrangement, and function."

Secondary Academic Expectation: 2.19 "Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations."

Secondary Core Content Code: 4.3.002 "Human migration has major physical and cultural impacts and can be the result of pressures or events that push populations from one place or pull them to another (e.g., push factors such as famines or military conflicts; pull factors such as climate or economic opportunity)."

Tertiary Academic Expectation: 2.20 "Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective."

Tertiary Core Content Code: 5.2.004 "During the Progressive Movement, World War I, and the Twenties, Americans experienced significant social, political, and economic changes (e.g., imperialism to isolationism, industrial capitalism, urbanization, political corruption, initiation of reforms)."

Percentage of test takers in 2003 who received

a score of 4: 2

a score of 3: 11

a score of 2: 38

a score of 1: 34

a score of 0: 8

Percentage of blank responses: 7

Scoring Guide

SCORE	DESCRIPTION
4	Student clearly describes two conditions in rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North, and clearly describes two conditions in northern cities during this time period that attracted African Americans to the North.
3	Student generally describes two conditions in rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North, and generally describes two conditions in northern cities during this time period that attracted African Americans to the North. **OR** Student clearly describes one or two conditions in rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North, and clearly describes one or two conditions in northern cities during this time period that attracted African Americans to the North (for a total of three conditions clearly described).
2	Student provides a limited description of one or two conditions in rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North, and provides a limited description of one or two conditions in northern cities during this time period that attracted African Americans to the North (for a total of three or four conditions described in limited terms). **OR** Student generally describes one or two conditions in rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North, and/or generally describes one or two conditions in northern cities during this time period that attracted African Americans to the North (for a total of two or three conditions generally described).
1	Student demonstrates minimal understanding (e.g., student provides a limited description of one or two conditions between 1910 and 1945 that caused African Americans to migrate to the North).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of conditions in the rural southern areas between 1910 and 1945 that caused African Americans to consider migrating to the North:

- Most African Americans were sharecroppers with little hope of ever owning land
- Cotton fields were destroyed by the boll weevil
- During the Depression the government paid farmers to leave their land fallow
- Racial segregation
- Lack of public accommodations
- Limited educational opportunities
- Violence/lynching
- Little industry

Examples of conditions in northern cities between 1910 and 1945 that attracted African Americans to the North:

- Improved economic conditions
- Henry Ford opened assembly line to African Americans
- Increase (especially during the World Wars) of industrial jobs; employers desperately needed workers
- Less racial segregation
- Perception that there was less violence against blacks
- More opportunities in creative arts (Harlem Renaissance)
- Better educational opportunities
- Availability of transportation between south and north
- Word of mouth and newspapers encouraged African Americans to move north

10. In the United States, the decade of the 1920s was a period of great economic growth and social change. It was also, however, a time of great social tension and contradictions. Some of the events and trends of that decade include:

    - women were granted the right to vote;
    - Prohibition outlawed the manufacture, sale, and consumption of alcoholic beverages;
    - the population of urban areas exceeded that of rural areas for the first time in U.S. history;
    - quota systems were enacted to restrict immigration;
    - modern conveniences, such as automobiles, appliances, and telephones, became more affordable;
    - labor strikes occurred as workers demanded shorter workdays and workweeks and general pay increases;
    - the Scopes Trial raised a public debate over the teaching of the theory of evolution; and
    - the Teapot Dome Scandal tarnished the administration of President Warren G. Harding.

    Select **one** of the events or trends listed above. Describe in detail the history or the circumstances surrounding the event or trend which resulted in social change in the United States.

Primary Academic Expectation: 2.20 "Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective."

Primary Core Content Code: 5.2.004 "During the Progressive Movement, World War I, and the Twenties, Americans experienced significant social, political, and economic changes (e.g., imperialism to isolationism, industrial capitalism, urbanization, political corruption, initiation of reforms)."

Percentage of test takers in 2003 who received

a score of 4: 2

a score of 3: 10

a score of 2: 36

a score of 1: 40

a score of 0: 6

Percentage of blank responses: 6

Scoring Guide

SCORE	DESCRIPTION
4	Student selects one of the events or trends listed and clearly describes the history or the circumstances surrounding it. Response is historically accurate.
3	Student selects one of the events or trends listed and generally describes the history or the circumstances surrounding it. Response may contain minor historical inaccuracies.
2	Student selects one of the events or trends listed and provides a limited description of the history or the circumstances surrounding it. Response may include historical inaccuracies.
1	Student demonstrates minimal understanding (e.g., student describes one of the events or trends listed, but does not describe the history or the circumstances surrounding it).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of history/circumstances:

- **Women's Right to Vote:** The women's movement for suffrage began in the mid-nineteenth century (Seneca Falls Convention, 1848). Leaders of the women's suffrage movement include Elizabeth Cady Stanton, Susan B. Anthony, and Alice Paul. The National American Woman Suffrage Association was prominent in organizing the battle for suffrage. Wyoming granted women's suffrage in 1869 (the first state to do so). Other states followed (especially in the West), but it was not until 1920 that the Nineteenth Amendment to the United States Constitution was ratified, guaranteeing that no state could deny the right to vote on the basis of sex.

- **Prohibition:** Although some states had prohibited the consumption of alcohol during the nineteenth century, the Progressives of the late nineteenth and early twentieth centuries were responsible for banning alcohol nationwide. The Anti-Saloon League and the Women's Christian Temperance Union led the fight against alcohol. They believed that alcohol contributed to crime and the breakup of families. The movement was also in response to the mass immigration of peoples whose cultures often celebrated drinking. The Eighteenth Amendment (enforced by the Volstead Act), ratified in 1919, barred the manufacture, sale, or importation of alcoholic beverages. The amendment proved unpopular and ineffective, however, and was repealed in 1933 (the Twenty-First Amendment).

- **Urban Nation:** 1920 marked the first time the census reported more people living in urban rather than rural areas (urban defined as areas with populations of 2,500 or more). 1920 marked a new departure for urban America. Cities experienced a new scale and type of growth, changing from relatively compact communities with densely packed populations to huge sprawling metropolitan areas covering tens of millions of acres. Immigration and industrialization fueled urbanization. The automobile and modes of public transportation allowed Americans more mobility and the opportunity to live in cities. From 1920 to the present, urban issues have dominated the attention of Americans.

- **Immigration Quotas:** America is a country that both celebrates and is deeply anxious about immigrants. The mass immigration at the turn of the twentieth century fueled efforts to curb the influx of immigrants. In 1920 nearly a quarter of the population was foreign-born. Immigration had slowed during WWI, but began rising dramatically between 1919 and 1921. In 1921 Congress passed the Emergency Quota Act that limited the number of immigrants to 3 percent of each nationality already in the country in 1910 (except for Asians, who were excluded altogether. Immigration from nations in the Western Hemisphere was not limited). The Immigration Act of 1924 reduced the quota to 2 percent of the 1890 figures for each national group. The National Origins Act of 1927 reduced the total number of new immigrants to 150,000.

- **Affordable Technology:** Inventions and revolutions in technology led to mass production in the 1920s. Henry Ford perfected the assembly line production of automobiles and could offer them to most Americans at an affordable price. The mass production of automobiles, appliances, and telephones led to mass consumption. Producers used advertising and credit buying to encourage Americans to buy all the new goods. The introduction of automobiles, appliances and the telephone profoundly quickened the pace of American life and ushered in modernity.

- **Labor Strikes:** Although the 1920s are generally considered a time of great prosperity, not all Americans profited from the economic growth. For example, between 1923 and 1929 business profits increased some 60 percent, while over the same period, workers' incomes grew by only about 10 percent. After WWI, inflation and management's lack of concern caused many industrial workers to walk off the job. By 1921 some five million workers were unemployed. The IWW was the most radical labor union.

- **The Scopes Trial:** The Scopes Trial reflected the tension between a world that was passing (Victorian America—rural, traditional, religious) and one that was emerging (modern America—urban, progressive, more secular). John Scopes was a high school teacher in Tennessee who taught the theory of evolution in violation of state law. He was tried in 1925. William Jennings Bryan was a lawyer for the prosecution and Clarence Darrow was the attorney for the defense. Because the theory of evolution implied that human beings have descended from ape-like creatures, the Scopes trial became known as the "Monkey Trial." Scopes was found guilty and fined $100.

- **Teapot Dome Scandal**: Corruption marked the administration of President Warren Harding (1920-24). The Teapot Dome scandal was one of several acts of corruption. Teapot Dome involved the lease of federally owned oil reserve lands in Teapot Dome, Wyoming, to private interests in return for bribes. High officials, including Secretary of the Interior Albert Fall, were convicted in 1926 for their part in the scandal. Fall was the first cabinet member to be imprisoned for crimes committed while in office.

SCORING INFORMATION FOR ARTS & HUMANITIES

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

1. The Renaissance period was an important period in music history. The term renaissance means

   ○ recovery

   ● rebirth

   ○ illumination

   ○ exploration

   Primary Academic Expectation: 2.25 "In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history."

   Primary Core Content Code: 1.3.036 "Renaissance 1400–1600. Reconciles Christian faith and reason. Promotes 'rebirth' of the classical ideal. Allows new freedom of thought."

   Percentage of test takers who answered this item correctly in 2000: 82

2. What style of dance would **most** likely portray a story or thematic idea?

   ○ aerobic dancing

   ○ line dancing

   ● ballet

   ○ rondo

   Primary Academic Expectation: 2.24 "Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities."

   Primary Core Content Code: 2.2.032 "Discuss how dance can portray thematic ideas and society, political and social beliefs."

   Percentage of test takers who answered this item correctly in 2002: 85

3. A play may have one or more turning points. The final, deciding turning point is called the

- ● climax.
- ○ dénouement.
- ○ exposition.
- ○ soliloquy.

Primary Academic Expectation: 2.24 "Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities."

Primary Core Content Code: 3.1.031 "Identify and discuss, using appropriate terminology, the use of dramatic structure [e.g., exposition, development, climax, reversal, dénouement (also illustrated in Freytag's Pyramid), tension]; character (e.g., protagonist, antagonist); literary devices (e.g., symbolism, foreshadowing); and components of drama/theatre (dialogue, monologue, soliloquy, ensemble, body, voice, script, sensory recall)."

Percentage of test takers who answered this item correctly in 2003: 68

4. Complementary colors are two colors at opposite points on the color wheel. Which colors are complementary?

- ○ red and orange
- ○ green and yellow
- ○ violet and green
- ● orange and blue

Primary Academic Expectation: 1.13 "Students make sense of ideas and communicate ideas with the visual arts."

Primary Core Content Code: 4.1.032 "Art Elements: color and color theory: primary and secondary hues, values (tints and shades), intensity (brightness and dullness); color relationship: triadic, complementary, analogous."

Percentage of test takers who answered this item correctly in 2003: 56

5. Shakespeare wrote both comedies and tragedies. Which is one of Shakespeare's comic plays?

○ *Romeo and Juliet*

● *A Midsummer Night's Dream*

○ *Hamlet*

○ *Macbeth*

Primary Academic Expectation: 2.23 "Students analyze their own and others' artistic products and performances using accepted standards."

Primary Core Content Code: 5.3.036 "Renaissance 1400–1600. Reconciles Christian faith and reason. Promotes 'rebirth' of the classical ideal. Allows new freedom of thought."

Secondary Academic Expectation: 2.25 "In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history."

Secondary Core Content Code: 3.3.036 "Renaissance 1400–1600. Reconciles Christian faith and reason. Promotes 'rebirth' of the classical ideal. Allows new freedom of thought."

Percentage of test takers who answered this item correctly in 2002: 60

Time Machine to the 60s

6. You are able to travel through time via a time machine. You choose to travel to the decade of the 1960s because you have a report due for your humanities class. Since your report is about music of that decade, you visit several years during the 1960s to listen to music of that period.

   a. Describe **two** ways that the issues and/or events of the 1960s (for example, the Civil Rights movement, the Vietnam War) affected the music of that time period.

   b. Describe **two** effects that music had on social change and/or people's beliefs in the 1960s.

Primary Academic Expectation: 2.25 "In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history."

Primary Core Content Code: 1.2.032 "Analyze and describe how factors such as time, place, and belief systems are reflected in music (See Arts and Humanities Reference Chart)."

Percentage of test takers in 2003 who received

a score of 4: 7

a score of 3: 16

a score of 2: 32

a score of 1: 25

a score of 0: 16

Percentage of blank responses: 4

Scoring Guide

SCORE	DESCRIPTION
4	Student clearly describes two ways that the issues and/or events of the 1960s affected the music of that time period. Student clearly describes two effects that music had on social change and/or people's beliefs in the 1960s.
3	Student generally describes two ways that the issues and/or events of the 1960s affected the music of that time period. Student generally describes one or two effects that music had on social change and/or people's beliefs in the 1960s. **OR** Student generally describes one or two ways that the issues and/or events of the 1960s affected the music of that time period. Student generally describes two effects that music had on social change and/or people's beliefs in the 1960s.
2	Student provides a limited description of one or two ways that the issues and/or events of the 1960s affected the music of that time period. Student provides a limited description of one or two effects that music had on social change and/or people's beliefs in the 1960s. **OR** Student generally describes two ways that the issues and/or events of the 1960s affected the music of that time period with no description of effects that music had on social change and/or people's beliefs in the 1960s. **OR** Student generally describes two effects the music had on social change and/or people's beliefs in the 1960s with no description of ways that issues and/or events of the 1960s affected the music of that time.
1	Student demonstrates minimal understanding (e.g., student provides a limited description of one way that the issues and/or events of the 1960s affected the music or one effect that music had on social change and/or people's beliefs in the 1960s).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Common Dance Elements

7. Different cultures often have different dance styles. One way that the differences in dance styles are expressed is through the dance elements of space, time, and force.

   a. Identify **two** dance styles that are very different from each other and that are from different cultures. Be sure to identify the culture that each of the two dance styles represents.

   b. Describe how **each** of the two dance styles uses the dance elements of space, time, and force. Be specific.

Primary Academic Expectation: 1.15 "Students make sense of and communicate ideas with movement."

Primary Core Content Code: 2.2.033 "Describe the similarities and differences in recreational, artistic, and ceremonial dance styles. (recreational: ballroom, line dancing, aerobic; artistic: folk, modern, jazz, ballet, musical, theatrical, ethnic; ceremonial: commemorative, conflict) (See Arts and Humanities Reference Chart)."

Secondary Academic Expectation: 1.15 "Students make sense of and communicate ideas with movement."

Secondary Core Content Code: 2.2.031 "Discuss how dance reflects history and culture. (See Arts and Humanities Reference Chart)."

Percentage of test takers in 2002 who received

a score of 4: 5

a score of 3: 18

a score of 2: 37

a score of 1: 27

a score of 0: 11

Percentage of blank responses: 2

Scoring Guide

SCORE	DESCRIPTION
4	Student identifies two dance styles that are very different from each other and that are from different cultures. Student identifies the culture that each dance style represents. Student clearly describes how each dance style uses the dance elements of space, time, and force.
3	Student identifies two dance styles that are very different from each other and that are from different cultures. Student identifies the culture that at least one of the two dance styles represents. Student generally describes how each dance style uses at least two of the dance elements of space, time, and force.
2	Student identifies two dance styles that are very different from each other and that are from different cultures. Student may or may not identify the culture that each dance style represents. Student provides a limited description of how each dance style uses at least two of the dance elements of space, time, and force. **OR** Student generally describes how one dance style uses the dance elements of space, time, and force. **OR** Student identifies two dance styles that are very different from each other and that are from different cultures. Student identifies the culture that at least one of the dance styles represents. Student generally describes how each dance style uses one of the dance elements of space, time, and force.
1	Student demonstrates minimal understanding (e.g., student generally describes how one dance style uses one or two of the dance elements of space, time, and force).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

Examples of ways the dance elements of space, time, and force can be expressed:
Space—shape, level, direction, pathway, focus, size
Time—tempo, rhythmic pattern, accent, duration
Force—heavy/light, sharp/smooth, tension/relaxation, bound/flowing

Protagonist vs. Antagonist

8. The protagonist and the antagonist are usually the two most important roles in a play or film. In order to be believable in their roles, both the protagonist and the antagonist must have logical motivation (or reasons) for their actions and behavior.

   a. Briefly describe a scene from a play or movie in which the antagonist is opposing the protagonist in some way.

   b. Explain the antagonist's motivation and the protagonist's motivation in the scene.

   c. Create **two** other possible motivations for the actions or behavior of the antagonist and the protagonist in the scene (that is, create two alternative motivations for each character).

Primary Academic Expectation: 2.22 "Students create works of art and make presentations to convey a point of view."

Primary Core Content Code: 3.1.031 "Identify and discuss, using appropriate terminology, the use of dramatic structure [e.g., exposition, development, climax, reversal, denouement (also illustrated in Freytag's Pyramid), tension]; character (e.g., protagonist, antagonist); literary devices (e.g., symbolism, foreshadowing); and components of drama/theatre (dialogue, monologue, soliloquy, ensemble, body, voice, script, sensory recall)."

Percentage of test takers in 2001 who received

a score of 4: 9

a score of 3: 20

a score of 2: 31

a score of 1: 22

a score of 0: 12

Percentage of blank responses: 6

Scoring Guide

SCORE	DESCRIPTION
4	Student briefly describes a scene from a play or movie in which the antagonist is opposing the protagonist in some way. Student clearly explains the antagonist's motivation and the protagonist's motivation in the scene. Student creates two clear alternative motivations for the actions or behavior of each character.
3	Student briefly describes a scene from a play or movie in which the antagonist is opposing the protagonist in some way. Student generally explains the antagonist's motivation and the protagonist's motivation in the scene. Student creates two general alternative motivations for the actions or behavior of each character. **OR** Student briefly describes a scene from a play or movie in which the antagonist is opposing the protagonist in some way. Student clearly explains the antagonist's motivation and the protagonist's motivation in the scene. Student creates one clear alternative motivation for the actions or behavior of each character.
2	Student briefly describes a scene from a play or movie in which the antagonist is opposing the protagonist in some way. Student provides a limited explanation of the antagonist's motivation and the protagonist's motivation in the scene (explanations may not reflect knowledge of the difference between a protagonist and an antagonist). Student creates one or two limited alternative motivations for the actions or behavior of one or both characters. **OR** Student briefly describes a scene from a play or movie in which the antagonist is opposing the protagonist in some way. Student generally explains the antagonist's motivation and the protagonist's motivation in the scene. The alternative motivations are missing or inappropriate.
1	Student demonstrates minimal understanding (e.g., student briefly describes a scene from a play or movie with two characters and provides a limited explanation of the motivation for one or both of the characters).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.